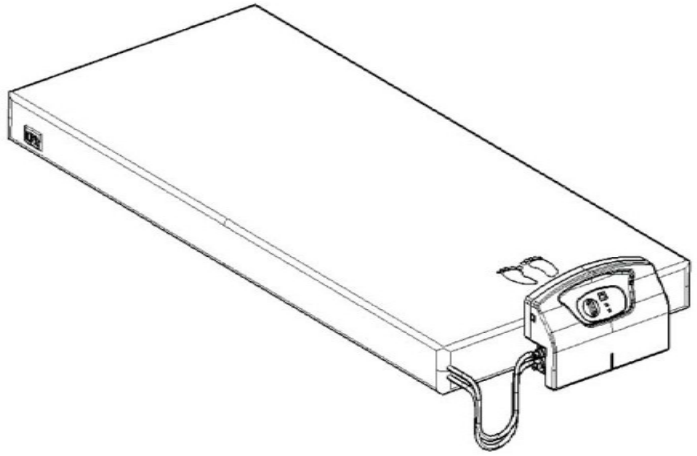
PROBASICS™
by PMI

Satin-Air™ APM

Alternating Pressure Mattress System



Please Read Instructions Before Use

Model No.:AP-210120

PROBASICS
by PMI

15 South Main Street

2nd Floor

Marlboro, New Jersey 07746

www.pmiusa.biz

Apex Medical (Kunshan) Corp.
No. 1368, Zi Zhu Rd., Kunshan Kai Fa Hi-Tech,
Kunshan City, JiangSu Sheng, China

MADE IN CHINA

596001-6130 V1.1

Contents

Important Safeguards 2

Introduction 3

Product Description 4

Installation 6

Operation 8

Cleaning 10

Storage 10

Specifications 11

Troubleshooting 12

Grounding Instructions 13

Limited Warranty 14

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

PMI warrants the products manufactured to be free from defects in materials and workmanship for a period of one year. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at PMI's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. PMI's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Probasics product. In the event you do not receive satisfactory warranty service, please write directly to PMI at the address on the back cover, provide dealer's name, address, date of purchase, indicate nature of the defect.

PMI will issue a serialized return authorization. The defective unit or parts MUST be returned for warranty inspection using the serial number, when applicable as identification within 30 days of return authorization date. Do not return products to our facility without our prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT PMI'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF PMI, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND PMI'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY PMI. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE INSTRUCTIONS IN THIS MANUAL.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. PMI SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

SOME STATES DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSIONS AND LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE OR PROVINCIAL LAWS AND REQUIREMENTS.

ELECTRICAL REQUIREMENT

GROUNDING INSTRUCTIONS

This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

DANGER-improper use of the grounding plug can result in a risk of electric shock

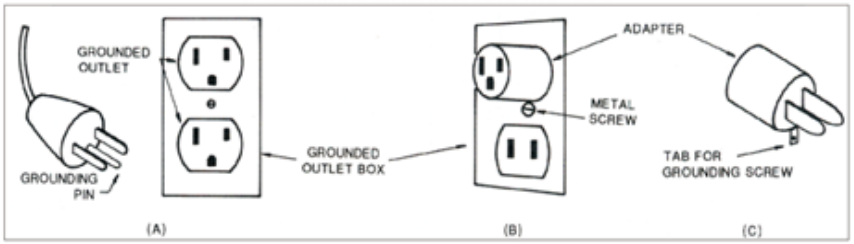
If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or

without yellow stripes is the grounding wire.
Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.

Note-The following instruction applies for 120VAC system only:

This product is for use on a nominal 12OVAC circuit and has a grounding plug that looks like the plug illustrated in figure B, in figure A as below. A temporary adapter, which look like the adapter illustrated in figure B and C, may be used to connect this Plug to a 2-pole receptacle as shown in figure B if a properly grounded outlet is not available. The temporary adapter should be used only until properly grounded outlet (figure A) can be installed by a qualified electrician. The green colored rigid ear, lug, and like extending from the adapter must be connected to a permanent ground such as properly grounded outlet box cover. Whenever the adapter is used. It must be held in place by the screw. If is necessary to use an extension cord, use only a 3-wire extension cord that has a three-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product. Replace or repair a damaged cord.

GROUNDING METHOD



IMPORTANT SAFEGUARDS

READ ALL INSTRUCTIONS BEFORE USING

DANGER - To reduce the risk of electrocution:

1. Always unplug this product immediately after using.
2. Do not use while bathing.
3. Do not place product where it can fall or be pulled into a tub or sink.
4. Do not place in or drop into water or other liquid.
5. Do not reach for a product that has fallen into water. Unplug immediately.

WARNING - To reduce the risk of burns, electrocution, fire, or injury to persons:

1. This product should never be left unattended when plugged in.
2. Close supervision is necessary when this product is used by, on, or near children or invalids.
3. Use this product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
4. Never operate this product if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the product to a service center for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never block the air openings of this product or place it on a soft surface, such as a bed or couch, where their openings may be blocked. Keep the air opening free of lint, hair, and other similar particles.
7. Never drop or insert any object into any opening or hose.
8. Connect this product to a properly grounded outlet only. See Grounding instructions.

NOTE, CAUTION AND WARNING STATEMENTS:

NOTE - Indicates some important suggestions.

CAUTION - Indicates correct operating or maintenance procedures in order to prevent damage to or destruction of the equipment or other property.

WARNING - Calls attention to a potential danger that requires correct procedures or practices in order to prevent personal injury.

SYMBOLS

"BF"symbol, indicate this product is according to the degree of protecting against electric shock for type BF equipment.

Grounding terminal

Attention—should read the instructions

Disposal of Electrical & Electronic Equipment (WEEE): This product should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.

1. Introduction

This manual should be used for initial set up of the system and for reference purposes.

1.1 General Information

The system is a high quality and affordable mattress system suitable for stage I, II bed sore treatment and prevention of pressure ulcers.

The system has been tested and successfully approved with the following standards:

CE

EN60601-1
EN 60601-1-2
EN 55011 Class B
IEC61000-3-2
IEC 61000-3-3

⚠ FOR US AND CANADA ONLY

E228589
53DG

CLASSIFIED C UL US

Medical Equipment-Air Pump
with respect to electrical shock, fire and
mechanical hazards only in accordance with
UL60601-1 AND CAN/CSA C22.2 NO.601.1

1.2 Intended Use

This product is intended to help and reduce the incidence of pressure ulcers while optimizing patient comfort. It also provide following purposes:

- Individual home care setting and long term care of those suffering from pressure ulcers.
- Pain management as prescribed by physician.

⚠ **NOTE :** Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

Mattress	Specification
Dimensions (LxWxH)	78.7" x 35.4" x 8"
Weight	12.4 lbs.
Pressure Range	30 - 50 mm Hg

9. Troubleshooting

PROBLEM	SOLUTION
Power is not on	♦ Check to see if the plug is connected to the wall outlet. ♦ If the wall outlet is connected to a wall switch, make sure the switch is turned on. ♦ Check breaker box for a blown breaker or fuse.
Alarm is on (Audio & Visual)	♦ Check to ensure connection between air tube connector and the pump is secure. ♦ Check CPR valve to ensure it is sealed. ♦ Check Air Cells for leakage.
Patient is bottoming out	♦ Pressure setting on the pump may be too low for the weight of the patient - Adjust pressure to higher setting and check again after a few minutes...repeat until patient is adequately supported. ♦ Check Air Cells for leakage.
Air Mattress is not secured	♦ Check all of the snap buttons that secure the individual air cells to the mattress cover to ensure they are all securely fastened. ♦ Check to ensure the mattress is properly secured to the bed frame by the elastic straps.
No air is being produced from some of the air outlets of the air tube connector	♦ This is normal during use under Alternating Mode. Air outlets cycle intermittently.

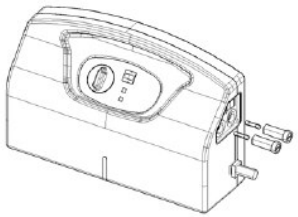
If your questions can't be answered with above information, it might require a technician to take care the problem. Please contact your local agent directly.

7. Maintenance

7.1 General

1. Check main power cord and plug if there are abrasions or excessive wear.
2. Check mattress cover for signs of wear or damage. Ensure mat tress cover and tubes are stubbed together correctly.
3. Check airflow from the air hose connector. The airflow should alternate between each connector every half-cycle time if it's in alternating mode.
4. Check the air hoses for any kink or break. For replacement, please contact an authorized dealer.

7.2 Fuse Replacement



1. Disconnect the plug form mains power when a blown fuse is suspected.
2. Remove the cover of the fuse holder by means of a mall screwdriver.
3. Insert a new fuse of the correct rating in, and replace the cover of the fuse holder back.

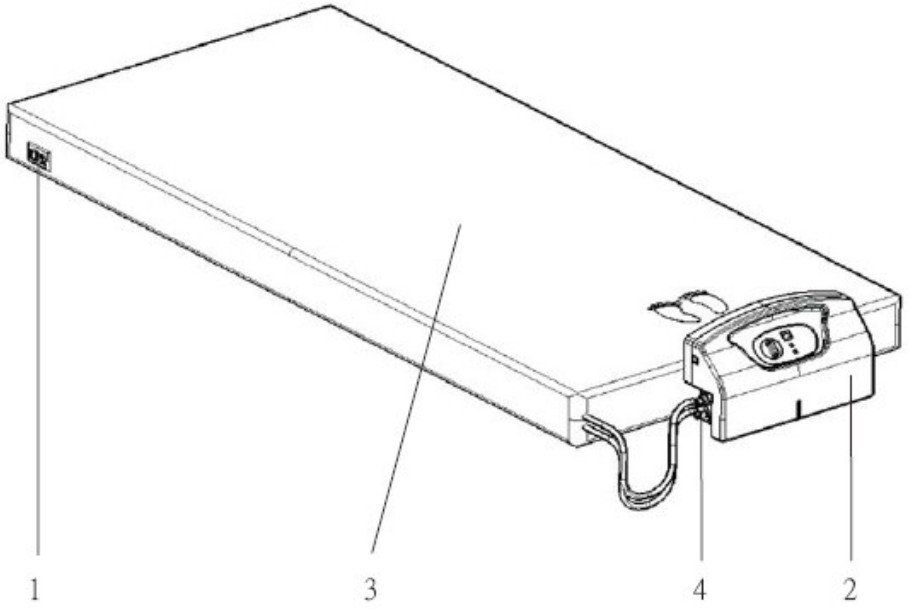
   The fuse should be rated as T1A/250V type.

8. Specifications

Pump		Specification
Power Supply		AC 120V / 60 Hz, 0.1 A
Fuse Rating		T 1A, 250V
Cycle Time		8 minutes
Dimensions (LxWxH)		11.8” x 3.7” x 7.5”
Weight		6.2 lbs.
Environment	Temperature	Operation: 50°F to 104°F Storage: 5°F to 122°F Shipping: 5°F to 158°F
	Humidity	Operation: 10% to 90% non-condensing Storage: 10% to 90% non-condensing Shipping: 10% to 90% non-condensing
Classification		Class I, Type BF, IPX0 Applied Part: Air Mattress Not suitable for use in the presence of a flammable anesthetic mixture (No AP or APG protection)

2. Product Description

2.1 Pump and Mattress System



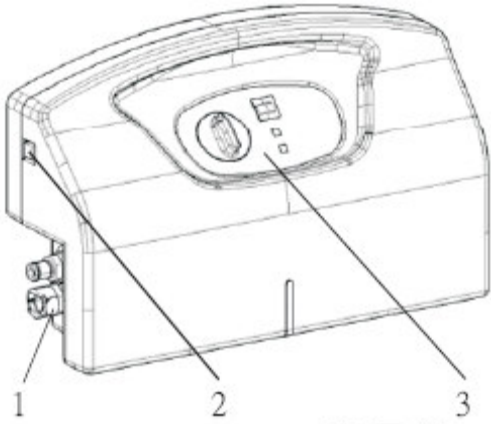
1.CPR

2.Pump unit

3.Mattress System

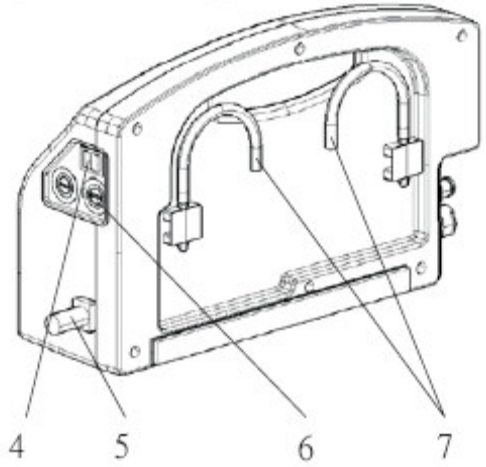
4.Quick Connectors

2.2 Pump Unit



Front

1. Quick Connectors
2. Alarm Reset
3. Front Panel



Rear

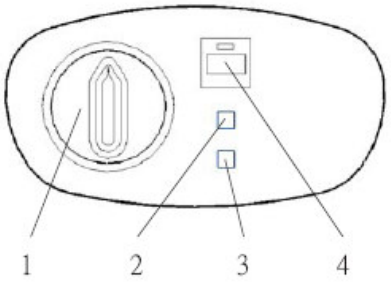
4.Power Switch

5.Power Cord

6.Fuses

7.Mounting Brackets

2.3 Front Panel



1. Pressure Adjust Knob
   Pressure adjust knob controls the Air pressure output. When turning clockwise, the output pressure will increase. counterclockwise for decreasing air pressure.

4.5 Static Mode

If the pump unit is equipped with STATIC function, press the Orange STATIC button to suspend the alternating mode of mattress. By pressing this button again, the mattress will be back to alternating therapy mode.

5. Cleaning

It is important to follow the cleaning procedures before using the machine on human bodies; otherwise, patients and/or doctors may have the possibility of getting infection. By wiping the pump unit with a damp cloth pre-soaked with a mild detergent, and keep it away from dust. If other detergent is used, choose one that will have no chemical effects on the surface of the plastic case of the pump unit.

⚠ **CAUTION:** Do not immerse or soak pump unit.

By wiping the mattress with a damp cloth pre-soaked with warm water containing a mild detergent. The cover may also be cleaned using sodium hypochlorite (bleach) diluted in water. All parts should be air dried thoroughly before use.

⚠ **CAUTION:** Do not use phenolic based product for cleaning.

⚠ **CAUTION:** After cleaning, dry the mattress without direct exposure of sunlight.

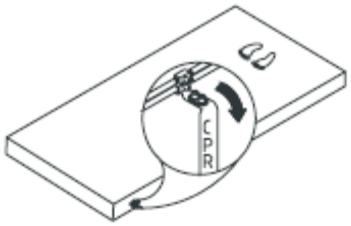
The carrying bag should be turned inside out and completely wiped down using the disinfectant solutions. Allow it to air-dry thoroughly. Once the inside is dry, turn it back and wipe down the outside of the bag with disinfectant solutions.

6. Storage

1. To store, lay the mattress out flat and upsides down.
2. Roll from the head end towards the foot end.
3. Foot-end strap can then be stretched around the rolled mattress to prevent unrolling.

⚠ **Note:** Do not fold, crease or stack the mattresses.

4.2 CPR



When there is an emergency to perform CPR on the patient, quickly pull the CPR valves to release air from mattress. The CPR valves are located at the head-end, right-hand-side of the mattress. The quick connector on the pump unit can be disconnected for faster deflation.

4.3 Pressure Set Up

Users can adjust pressure of air mattress to a desired softness by adjusting the pressure knob. Please consult your physician for a suitable setting.

Patient can lie on the mattress after Normal Pressure indicator lights up, this indicates the pressure is reached to the desired softness.

⚠ **NOTE**: Check to see if the suitable pressure is selected by sliding one hand between the deflated air cells and the patient to feel's patient's buttock. Users should be able to feel the minimum

4.4 Low Pressure and Alarm Function

When an abnormal low pressure occurred, the Low Pressure indicator (yellow LED) will light up. Check to ensure all connections are connected properly and that they are correctly installed as per installation instructions.

⚠ **NOTE**: If the pressure level is consistently low, check for any leakage (tubes or connecting hoses). If necessary, replace any damaged tubes or hoses. Or, contact local qualified dealer for repair.

The pump unit is equipped with alarm buzzer, the alarm will buzz and the Low Pressure indicator light up when air pressure is below normal. To mute the alarm, simply press the Alarm Reset button on the side. However, the low pressure indicator remains until the low-pressure fault condition is resolved.

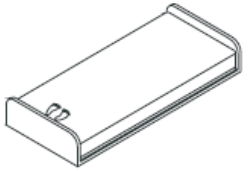
⚠ **Note** :To re-activate the audible alarm function, please press Alarm Reset button again on the side to turn on the function.

2. Normal Pressure Indicator - When green LED lights up, the pres sure inside of air mattress reaches the preset pressure setting.
3. Low Pressure Indicator - When low pressure LED lights up, the pressure inside of air mattress is below normal. Please refer to troubleshooting.
4. Static Function - Press orange STATIC button to suspend alternating function, if needed. The pressure inside of air tubes will be adjusted to the same softness. Press the STATIC button again, it will switch back to alternating mode.

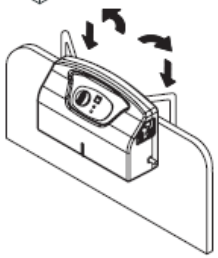
3. Installation

Unpacking the box to inspect for any damage which may have occurred during shipment. If there are any damages, please contact your dealer immediately.

3.1 Pump & Mattress Installation



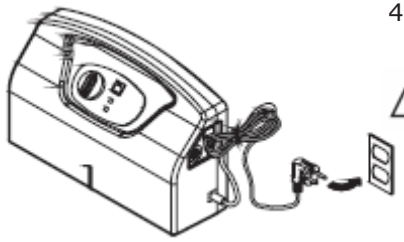
1. Place the mattress or pad on top of the bed frame. Please note for the foot end.



2. Hang the pump onto bed rail (foot-end), and adjust hangers to best upright position of the pump or place the pump on a flat surface.

3. Connect air hose connectors from Air Mattress to the pump unit. When a "click" sound is felt or heard, the connection is completed and secured.

⚠ **Note:** Check and ensure the air hoses are not kinked or tucked under mattress.



4. Plug the power cord into electrical outlet.

⚠ **Note:** 1.Make sure the pump unit is suitable for the local power voltage.
2. The plug is also served to disconnect the device.

⚠ **Caution:** The pump can only be applied to the mattress recommended by the manufacturer. Do not use it for any other purpose.
(Applied part: air mattress)

5. Then turn the main power switch to ON position.

Grounding:

Before any connection to the output connectors is made, the unit shall be connected to a protective earth conductor via the three-core main cable; the mains plug shall be inserted only into a socket outlet provided with a protective earth contact. The protective action shall not be negated by the user of an extension cord without protective conductor.

Several installation tips are listed below:
After installation, the extra length of the power cord, if any, should be neatly arranged to avoid any tripping accidents. The equipment should be firmly placed at position where users/doctors can access easily.

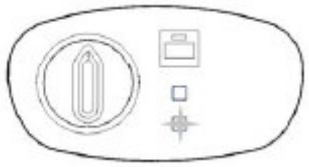
4. Operation

⚠ **Note:** Always read the operating instruction before use.

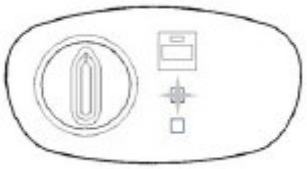
4.1 General Operation

1. Switch on the main power switch on the side.

2. The pump unit is to delivering air into mattress.



3. The low pressure indicator (Yellow LED) will light up when the mattress is not yet fully inflated.



4. When the appropriate pressure is reached, the low pressure indicator (yellow LED) will go off and normal pressure indicator (green LED) will light up automatically.

⚠ **Note:** Every time when mattress is first setup for use, it is recommended that the pressure knob to be set To "Firm" for the quickest inflation. User can then adjust air mattress to the desired softness after ward.